

In the Drawings:

Replace Fig. 4 with a new Fig. 4 enclosed herewith.

REMARKS

Reconsideration of the application in view of the present amendment is respectfully requested.

By the present amendment, the specification has been amended to correct formal errors therein. A sheet of drawings with Fig. 4 has been replaced with a new sheet with a modified Fig. 4. Claims 1, 6, 8, and 9 have been amended to eliminate informalities therein.

Based on the foregoing amendments and the following remarks, the application is deemed to be in condition for allowance, and Action to that end is respectfully requested.

I. Objection to the Drawings

The Examiner objected to the drawings under 37 C.F.R. § 1.121(d) for missing block labels in Fig. 4. As noted above, Fig. 4 has been replaced with a new Fig. 4 which contains appropriate block labels.

Approval of the new Fig. 4 (replacement sheet, together with a letter to the Official Draftsperson being enclosed) is respectfully requested.

II. Objections to the Specification

The Examiner objected to the Specification for formal error therein. As noted above the specification has been amended to correct the formal errors pointed out by the Examiner. The Examiner's suggestions for amending the specification are appreciated.

III. Objection and Rejection of Claims

IIIa. Objection to the Claims

The Examiner objected to the claims for informalities therein pointing out specific cases in claims 1, 6, 8, and 9. As noted above, claims 1, 6, 8, and 9 have been appropriately amended.

IIIb. Rejection of Claims

The Examiner rejected claims 1, 2 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Reining, U.S. Patent No. 6,471,106 (Reining) in view of Amini, U.S. Patent Publication 2001/0038287. Claim 10 was rejected as claims above and further in view of Nikolich, U.S. patent No. 4,483,474 (Nikolich). It is respectfully submitted that claims 1-11 are patentable over the

cited prior art, claims 3-8 and 11 having already been indicated as being allowable.

Specifically, claim 1 recites that the inductive metal detector system (20) has a means for generating an alternating current for the excitation coil arrangement (21) having at least two consecutive frequencies (f_n) from a starting frequency (f_0) to an end frequency (f_{\max}).

The Examiner recognizes that Reining does not disclose an oscillator having two consecutive frequencies f_n from a starting frequency f_0 to an end frequency f_{\max} but asserts that it would have been obvious to one skilled in the art to use the inductive metal detector of Amini that has a means for generating an alternating current for the excitation coil arrangement with the oscillator having at least two consecutive frequencies f_n from a starting frequency f_0 to an end frequency f_{\max} , as the inductive metal detector of Reining for the purpose of obtaining measurements of objects behind a magnetizable substance to improve determination of hand or metal placement. Applicant respectfully disagrees with this assertion.

Reining discloses a nail gun (10) with a sensor circuit (30) which disables the nail gun from automatically discharging when the nail gun is misdirected

toward human flesh. A coil of the sensor circuit is provided at a tip (22) of the nail gun and produces a magnetic field or flux after an oscillating current is provided to the coil (col. 4, lines 64-66). The sensor circuit is further provided with a capacitor (33). The capacitance (C2) of the capacitor is selected to tune in combination with the inductance (L1) of the coil 26 into parallel resonance at approximately 4.5 MHz (col. 5, lines 21-30). Inductance (L1) and capacitance (C2) form thereby a resonant tank circuit (31). The measurement of changes in the resonant frequency of the resonant tank circuit is then used as an indication of the reactance of the material. The values for reactance and resistance are processed and are then compared to values that are known to be approximately those of human flesh (col. 7, lines 34-51). Therefore, it is necessary that the frequency which is used for the measurements is static and is the same frequency which was used for defining the reference values for reactance and resistance.

It is respectfully submitted that one skilled in the art would not have combined the teaching of Reining with those of Amine who teaches to use different frequencies for measurements with a logging tool for measurement of receptivity through casing, as this is contrary to the aim of Reining, to use a

single frequency in order to compare the result of a measurement with a known value for reactance and resistance for this frequency.

In view of the above, it is respectfully submitted that it would not be obvious to combine Reining and Amine.

Accordingly, it is respectfully submitted that the present invention as defined by claim 1 is not obvious over the prior art, and claim 1 is, therefore allowable.


Claims 2, 9, and 10 depend on claim 1 and are likewise allowable, claims 3-8 and 11 having been indicated as being allowable.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

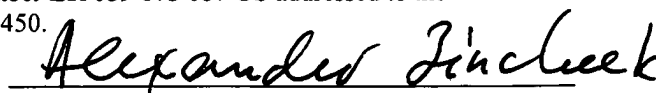
Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place the case in condition for final allowance, it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,


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This correspondence is being deposited with the United States Postal Service on January 4, 2006 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number **ER 059 675 087** US addressed to the Honorable Commissioner for Patents, Alexandria, VA 22313-1450.


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